



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,339	12/10/2001	Rakshit Lamba	03234.0001U2	1524
23859	7590	06/25/2004	EXAMINER	
NEEDLE & ROSENBERG, P.C.			LISH, PETER J	
SUITE 1000			ART UNIT	
999 PEACHTREE STREET			PAPER NUMBER	
ATLANTA, GA 30309-3915			1754	

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,339

Applicant(s)

LAMBA ET AL.

Examiner

Peter J Lish

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) 35-68 and 71-76 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34, 69 and 70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/16/02; 1/29/03; 4/6/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I in the reply filed on 4/6/04 is acknowledged. The traversal is on the ground(s) that there is no burden of search shown. This is not found persuasive because the groups are searched in different classifications and are drawn to different subject matter. The applicant's specific request for the rejoinder of Group II, claim 34, is found persuasive and claim 34 will be examined along with the claims of elected Group I.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-11, 13-17, 19-26, 29-31, and 69-70 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hatanaka et al. (US 4,764,547).

Hatanaka teaches a method for treating carbon black with a variety of amine compounds to produce surface coated carbon black. Hatanaka teaches that the method comprises mixing an organic solution or liquid dispersed in water containing the amine compound with the carbon black. It is preferably taught to provide about 0.5 to 5 parts by weight of amine to 100 parts of carbon black. The list of amines taught by Hatanaka includes those amines claimed in claims 3-

Art Unit: 1754

10 and 19-26. Regarding claims 13 and 29, it is seen that the amine is added to the carbon black while the carbon black is being pelletized and the materials are thereby compounded, or beaded.

It is noted that the present claims 1 and 17 are limited by a “substantially neat amine” and a mixing “substantially free of a solvent or carrier” respectively. These limitations are determined to be equivalent due to the description of “substantially neat” given in the specification. Nevertheless, this limitation allows for an amount of water or organic solvent to be present. Hatanaka et al. does not explicitly teach the amount of solvent or dispersant used, however, it is expected that an amount of solvent or dispersant that would not significantly affect the surface coated carbon black product be used.

Regarding claims 16 and 69-70, there is no difference seen between the carbon black produced by Hatanaka et al. and that produced by the method of the instantly claimed invention. It is held that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. The burden to show a different product is thereby shifted to the applicant, as the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith. See *In re Brown*, 173 USPQ 685, 688 and *In re Fessman*, 180 USPQ 324.

Claims 1-3, 11-19, 28-31, and 69-70 are rejected under 35 U.S.C. 102(b) as being anticipated by Medalia et al. (US 5,200,164).

Art Unit: 1754

Medalia et al. teaches a method for the surface treatment of carbon blacks with amine compounds in order to increase the dispersing characteristics of the carbon black, which is utilized for various applications, including as pigments, fillers, or reinforcing agents. The carbon black is treated by the spraying of an amine compound alone, or optionally with a pelletizing oil, over the carbon black. Medalia et al. teaches that the amine treating agent makes up between 0.25-20 % by weight, preferably between 0.5 and 8 % by weight of the treated carbon black product. Regarding claims 13 and 29, it is seen that the amine is added to the carbon black, followed by pelletizing; the materials are thereby compounded, or beaded.

Claims 1-3, 11, 16-19, and 69-70 are rejected under 35 U.S.C. 102(b) as being anticipated by Harris (US 2,867,540).

Harris teaches a method for the surface treatment of carbon blacks with amine compounds in order to increase the dispersing characteristics of the carbon black, which is utilized for various applications, including its admixture into rubber compositions. Harris teaches that the amine may be used per se (without any solvent or carrier) or in solution with water or other solvents for application to the carbon black. It may be added as a liquid or as a vapor.

Claims 1-3, 11, 16-19, 27, 32-34, and 69-70 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 1,054,620.

GB '620 teaches a method for the surface treatment of carbon blacks with amine compounds in order to increase the reinforcement characteristics of the carbon black, which is

Art Unit: 1754

mixed into rubber compositions. GB '620 teaches the mixture of the amine compound in vapor phase, substantially free of a carrier or solvent, with the carbon black. The carbon black used is taught to have a surface area of between 60 and 400 m²/g, which incorporates carbon black having a surface area of less than 130 m²/g and carbon black having a surface area between 77 and 119 m²/g.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-10 and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Medalia et al. taken with Hatanaka et al.

Medalia et al. is applied above. Medalia et al. does not specifically teach the use of the amine compounds, as claimed. Hatanaka et al., however, teaches the use of the claimed amine compounds in the surface treatment of carbon blacks, so as to achieve increased dispersing characteristics. It would have been obvious to one of ordinary skill at the time of invention to use the specific amines, as taught by Hatanaka et al., in the process of Medalia et al., because they are taught to achieve the same effect.

Art Unit: 1754

Claims 4-10 and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris taken with Hatanaka et al.

Harris is applied above. Harris does not specifically teach the use of the amine compounds, as claimed. Hatanaka et al., however, teaches the use of the claimed amine compounds in the surface treatment of carbon blacks, so as to achieve increased dispersing characteristics. It would have been obvious to one of ordinary skill at the time of invention to use the specific amines, as taught by Hatanaka et al., in the process of Harris, because they are taught to achieve the same effect.

Claims 4-10 and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB '620 taken with Hatanaka et al.

GB '620 is applied above. GB '620 does not specifically teach the use of the amine compounds, as claimed. Hatanaka et al., however, teaches the use of the claimed amine compounds in the surface treatment of carbon blacks, so as to achieve increased reinforcement characteristics when mixed into rubber compositions. It would have been obvious to one of ordinary skill at the time of invention to use the specific amines, as taught by Hatanaka et al., in the process of GB '620, because they are taught to achieve the same effect.

Claims 1-11, 14-26, 30-31, and 69-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatanaka et al. taken with GB '620.

Hatanaka teaches a method for treating carbon black with a variety of amine compounds to produce surface coated carbon black. Hatanaka teaches that the method comprises mixing an

Art Unit: 1754

organic solution or liquid dispersed in water containing the amine compound with the carbon black. It is preferably taught to provide about 0.5 to 5 parts by weight of amine to 100 parts of carbon black. The list of amines taught by Hatanaka includes those amines claimed in claims 3-10 and 19-26. Hatanaka et al. does not specifically teach the mixing of the carbon black with the amine in substantially neat form, or without the use of a solvent or carrier.

GB '620 however, teaches an equivalent process for the surface treatment of a carbon black with an amine compound. The process is either carried out with the amine in liquid form with the use of a solvent, identical to that taught by Hatanaka et al., or with the amine in gaseous form without the use of a carrier or solvent. It would have been obvious to one of ordinary skill at the time of invention to substitute the gaseous contacting method of GB '620 for the solvent method in the process of Hatanaka et al., as it is seen to have an equivalent effect of surface treating the carbon black.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: JP 62-250073 and JP 11-256067.

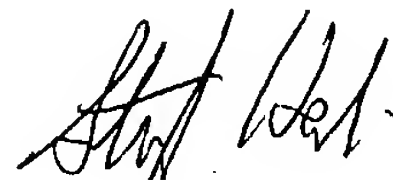
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Lish whose telephone number is 571-272-1354. The examiner can normally be reached on 9:00-6:00 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PL



STUART L. HENDRICKSON
PRIMARY EXAMINER